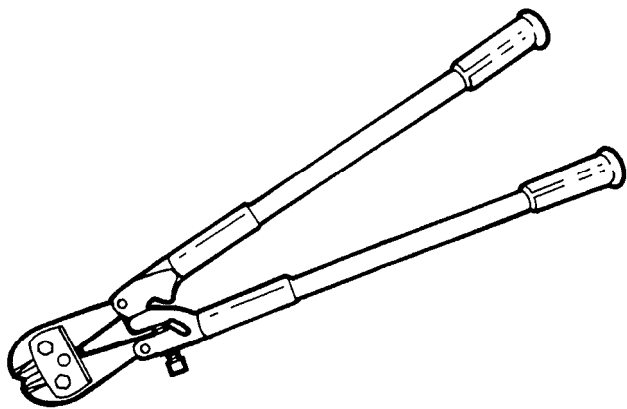


Chapter 32 BOLT AND CABLE CUTTERS

HOW TO CHOOSE AND USE THEM

The "Types and Uses" section provides you with a list of some of the types of cutters. These pages should help you select the right cutter to do the job.

The "Using" section tells you how to use the cutter to perform the desired function. The "Care" procedures tell you how to care for the item.



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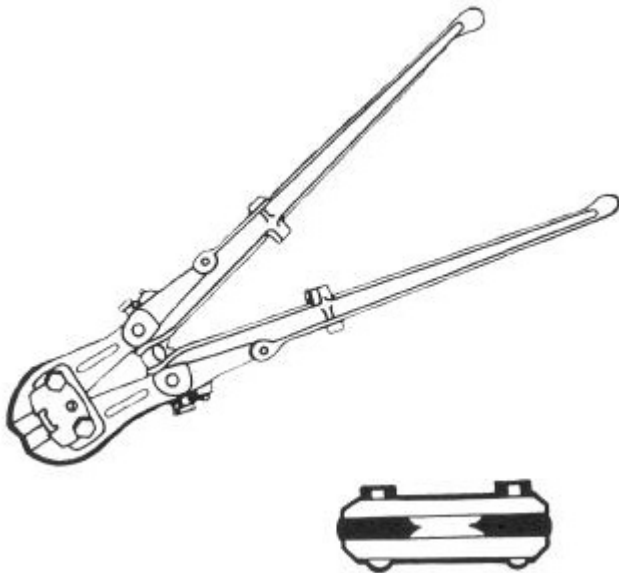
TYPES AND USES

WARNING

BOLT CUTTERS ARE CONSIDERED SECURITY ITEMS. ALWAYS SECURE, THESE TOOLS WHEN NOT IN USE.

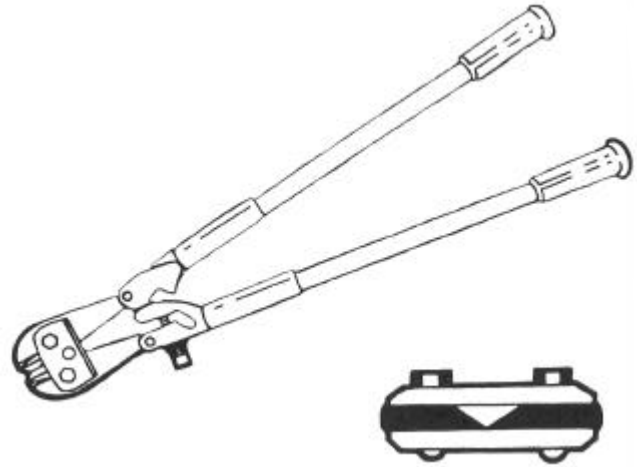
Bolt and cable cutters come with a variety of cutting edges which are designed for specific applications. They are shaped like giant shears with short blades and long handles. The handles are hinged at one end. The cutters are at the end of extensions, which are jointed in such a way that the inside joint is forced outwards when the handles are closed. This forces the cutting edges together with great force. Bolt cutters are made in lengths from 18 to 36 inches. The larger ones will cut mild steel bolts and rods up to 1/2-inch diameter.

CENTER CUT CUTTER



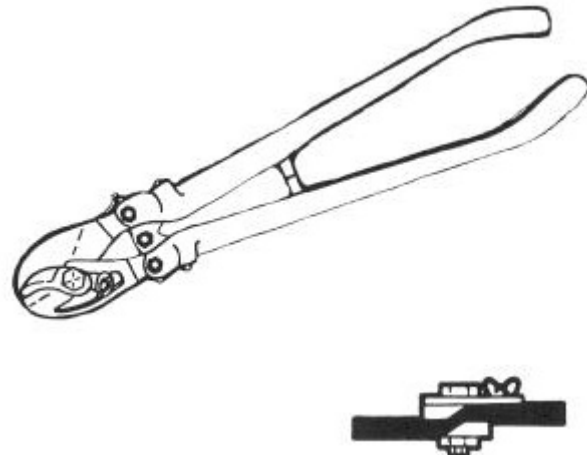
The center cut cutter is used for all general-purpose cutting. The cutting jaws are firmly fixed in line with the handles. The cutting edges are in the center of the jaw between equal levels. The longer the handle, the greater the cutting capacity. The cutting capacities range from 3/16 inch to 1/2 inch for medium steel, and from 5/16 inch to 11/16 inch for soft steel. The handles range from 14-inch to 42-inch lengths.

CLIPPER CUT CUTTER



The cutting edges of the clipper cut cutter are in line with the handles and beveled almost entirely from one side. These cutters allow very close cutting of projecting ends. The cutting capacities range from 1/4 inch to 9/16 inch for medium steel, and from 5/16 inch to 11/16 inch for soft steel. The handles range from 14-inch to 42-inch lengths.

SHEAR CUT, FLAT BAR, AND STRIP CUTTER



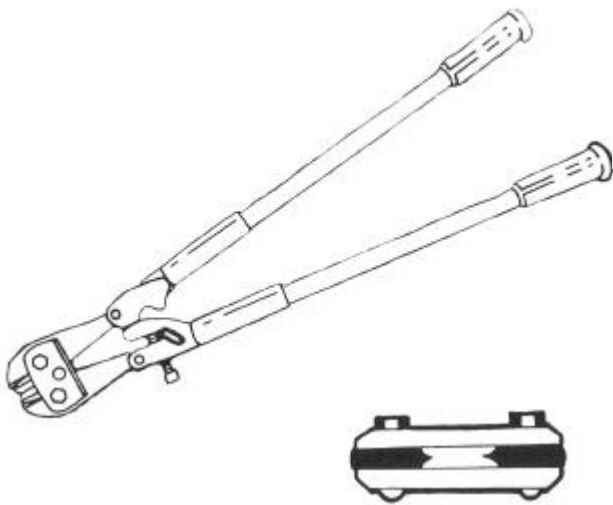
Shear cut, flat bar, and strip cutters are used to cut flat-soft, medium-hard bar, and strip stock. The cutting edges of the jaws pass each other in the manner of scissors, making a complete shear cut.

TYPES AND USES - Continued

SHEAR CUT, FLAT BAR, AND STRIP CUTTER (Cont)

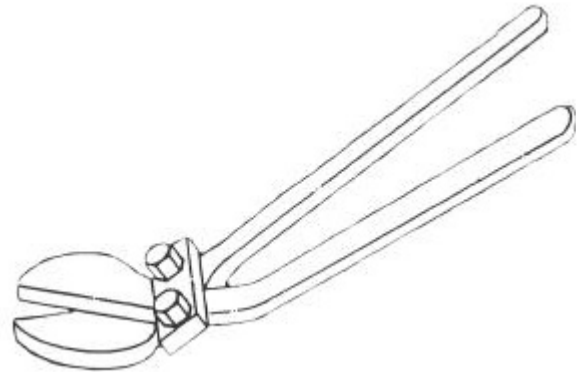
The cutting capacities range from $7/8 \times 5/32$ inch to $1-1/2 \times 9/32$ inch for soft and medium steel, and from $3/4 \times 1/8$ to $1-7/16 \times 1/4$ inch for hard steel. The handles range from 14-inch to 36-inch lengths.

SIDE NUT SPLITTER CUTTER



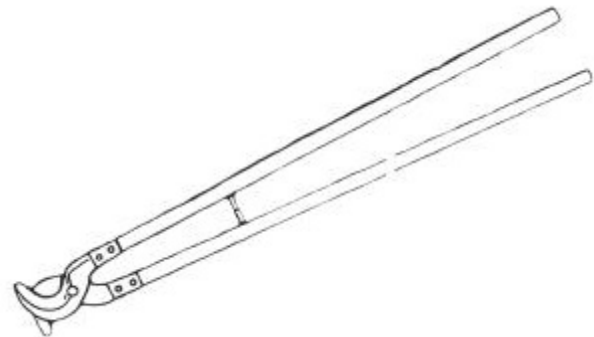
The side nut splitter cutter has the edge of the cutting jaws in line with the handles. When adjusted properly, the cutting edges will remain separated after the nut is split. This tool is used to split nuts off bolts, with the tool "head on" to the bolt, without damaging the bolt. Cutting capacity is rated for a $3/8$ -inch bolt nut and is adjustable to $5/16$ -inch and $1/4$ -inch capacity. The handle is 24 inches long.

ANGULAR CUT CUTTER



Angular cut cutters have the cutting edges offset 30 degrees from the handles. This is so the user can keep the work in sight. It is used for close cutting of soft or medium-hard metals. Cutting capacities range from $1/4$ inch to $1/2$ inch for medium steel. The handles range from 14 inches to 36 inches in length.

SHEAR CUT CABLE CUTTER



Shear cut cable cutters have curved interposing cutters. They are used to cut lead and rubber-covered cable, and communication cable. Cutting capacities for lead and rubber-covered cable is $1-3/8$ inches for the $25-1/2$ -inch handle, and $2-1/4$ inches for the 37-inch handle. The communication cable cutting capacity for the $25-1/2$ -inch handle is 500,000 circular mils, and 750,000 circular mils for the 37-inch handle.

SAFETY

1. Wear safety glasses when cutting.
2. When using bolt cutters, make sure your fingers are clear of the jaws and hinges.
3. Take care that the bolt head or piece of rod cut off does not fly and injure you or someone else. When the cutters are brought together rapidly, sometimes a bolt-head or piece of rod being cut off will fly some distance. The harder the material, the more it will fly.
4. If it is necessary to cut electrical cable or wire which is already installed, be sure that the power is disconnected before using the cable cutter on it.
5. Bolt cutters are fairly heavy, so make sure that they are stored in a safe place where they will not fall and injure someone.

USING CENTER CUT CUTTERS

WARNING

WHEN USING BOLT CUTTERS, MAKE SURE YOUR FINGERS ARE CLEAR OF THE JAWS AND HINGES. WEAR EYE PROTECTION.

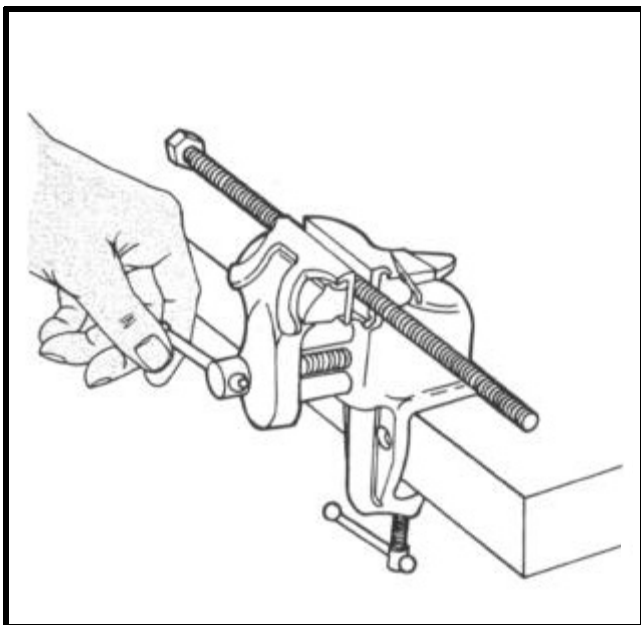
CAUTION

Never attempt to cut spring wire or other tempered metal with bolt cutters. This will cause the jaws to be sprung or nicked.

- 3 Position the work as far back as possible into the jaws, to prevent damage to the jaws as well as to reduce the pressure required for cutting.

CAUTION

Use extreme care when using cutter to avoid catching any part of the body or clothes between handles as pressure is applied to them.



- 1 Clamp or steady the work if unattached before cutting, to prevent the cutters from slipping.
- 2 Dry hands and handles of cutter before using to prevent slipping.



- 4 Stand at a right angle to the work being cut and apply steady pressure to the handles until the work has been cut off. Do not pry or twist with the handles while cutting.

CARE OF BOLT AND CABLE CUTTERS

1. Replace worn cutters when necessary.
2. Keep moving parts well oiled.
3. Keep the adjusting screws just tight enough to ensure that the cutting edges meet along their entire length when the jaws are closed.
4. Keep cutter jaws at right angles to the piece being cut. Do not twist or pry with the tool while cutting.
5. Do not sharpen edges too sharp. Leave edge approximately 1/64-inch wide for longer jaw life.
6. Before storing, wipe dirt and grease from the cutter and coat the metal parts lightly with oil to prevent rust.
7. Store the cutter in a special compartment of the tool box or on a shelf where it cannot fall.

